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(54) Fingerprint detecting device

(57) A fingerprint detecting device includes a flat transparent body, a light source, a thin surface film layer, a fluid layer, and an image detection unit. The transparent body on which a skin surface of a finger is pressed has a surface constituted by a scattering surface with a fine three-dimensional unevenness. The light source irradiates incident light from an inside of the transparent body on the skin surface pressed against the surface of the transparent body. The surface film layer is formed on the surface of the transparent body via a small gap, on which a three-dimensional pattern of the skin surface is transferred by pressing the finger. The fluid layer is formed by sealing one of a gas and a liquid in the gap between the surface of the transparent body and the surface film layer, and is pressed by the surface film layer on which the three-dimensional pattern of the skin surface is transferred. The image detection unit detects an image fingerprint pattern on the basis of the light from the light source, the reflection of which is changed at the surface of the transparent body, when the surface film layer comes into contact with the surface of the transparent body in accordance with the three-dimensional pattern of the skin surface.

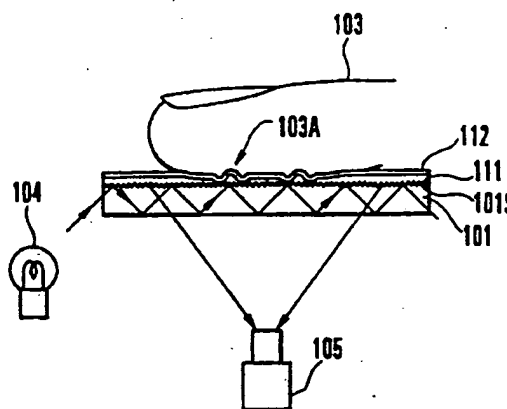


FIG. 1

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# EUROPEAN SEARCH REPORT

Application Number  
EP 98 10 5486

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The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>24 June 1999</b>	Examiner <b>Granger, B</b>
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone  Y : particularly relevant if combined with another document of the same category;  A : technological background  O : non-written disclosure  P : intermediate document</p> <p>T : theory or principle underlying the invention  E : earlier patent document, but published on, or after the filing date  D : document cited in the application  L : document cited for other reasons  .....  &amp; : member of the same patent family, corresponding document</p>			

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